

410 IAC 1-2.5-143 Typhoid and paratyphoid fever; specific control measures

Authority: IC 16-19-3-4; IC 16-41-2-1

Affected: IC 16-41-2; IC 16-41-9

Sec. 143. The specific control measures for typhoid and paratyphoid fever (infectious agents: Salmonella serotype Typhi, Paratyphi A, Paratyphi B (tartrate negative), or Paratyphi C) are as follows:

(1) An investigation by the local health officer shall meet the following conditions:

- (A) Be performed immediately.
- (B) Include a three (3) week history of the following prior to symptom onset:
  - (i) Food and drink consumption.
  - (ii) Domestic and international travel.
- (C) Identify unreported cases or carriers.
- (D) Identify any potentially contaminated:
  - (i) food;
  - (ii) water;
  - (iii) milk; and
  - (iv) shellfish.
- (E) If the case traveled three (3) weeks prior to onset, all members of travel groups in which a case has occurred shall be interviewed for probable source of infection and additional cases.
- (F) Determine if the case is part of an outbreak.
- (G) Determine if the case is a:
  - (i) food employee;
  - (ii) daycare worker;
  - (iii) health care worker; or
  - (iv) daycare attendee, a school attendee, or anyone who lives at a residential institution.
- (H) Determine if the case is a contact of a food employee serving a highly susceptible population.

(2) In addition to standard precautions, contact precautions should be used for diapered and incontinent children for the duration of illness until consecutive stool cultures are negative. For others, the following guidelines shall apply:

- (A) Cases who are food employees shall be excluded from employment involving food handling if the case is diagnosed with an infection from Salmonella Typhi or Paratyphi A, B (tartrate negative), or C, or reports a previous infection with Salmonella Typhi or Paratyphi A, B (tartrate negative), or C, diagnosed by a health practitioner within the past three (3) months without having received antibiotic therapy, as determined by a health practitioner, exclude until all of the following have occurred:
  - (i) Three (3) consecutive negative stool and urine cultures have been collected:
    - (AA) at least twenty-four (24) hours apart;
    - (BB) at least forty-eight (48) hours after cessation of any antimicrobial treatment; and (CC) at least one (1) month after onset.
  - (ii) The local health officer has determined the employee has been asymptomatic for at least twenty-four (24) hours.
  - (iii) The case has been counseled about preventive measures, such as hand washing procedures, that must be followed to prevent transmission of disease.
- (iv) The local health officer has discussed the following topics with the employer:
  - (AA) The employer's duty to comply with local and state rules pertaining to prevention of infectious diseases.
  - (BB) The availability of required proper hand washing facilities for all employees.
  - (CC) The correction of any observed lapses in hygienic measures by employees.
- (B) Cases employed as daycare workers, health care workers, or in similar positions shall be excluded from employment involving direct care of children or hospitalized or institutionalized patients until all of the following have occurred:
  - (i) Three (3) consecutive negative stool cultures have been collected: (AA) at least twenty-four (24) hours apart;
  - (BB) at least forty-eight (48) hours after cessation of any antimicrobial treatment; and (CC) at least one (1) month after onset.
  - (ii) The local health officer has determined the worker has been asymptomatic for at least twenty-four (24) hours.
  - (iii) The case has been counseled about preventive measures, such as hand washing procedures, that must be followed to prevent transmission of disease.
  - (iv) The local health officer has discussed the following topics with the employer:
    - (AA) The employer's duty to comply with local and state rules pertaining to prevention of infectious diseases.

- (BB) The availability of required proper hand washing facilities for all employees. (CC) The correction of any observed lapses in hygienic measures by employees.
- (v) If the case is still infected after the initial three (3) stool cultures, the case may return to work provided that the case has been fully compliant with all instructions and screening requirements under this section.
- (C) Household and other close contacts of the case shall be excluded from employment involving food handling and direct care of children or hospitalized or institutionalized patients until the following have been met:
  - (i) Two (2) consecutive negative stool cultures have been collected: (AA) at least twenty-four (24) hours apart; and (BB) at least forty-eight (48) hours after cessation of any antimicrobial treatment.
  - (ii) The local health officer has determined the contact is asymptomatic.
- (D) Cases shall be excluded from attending schools, preschools, and daycare facilities until all of the following have occurred:
  - (i) Three (3) consecutive negative stool cultures have been collected: (AA) at least twenty-four (24) hours apart; (BB) at least forty-eight (48) hours after cessation of any antimicrobial treatment; and (CC) at least one (1) month after onset.
  - (ii) The local health officer has determined the case has been asymptomatic for at least twenty-four (24) hours.
  - (iii) The case or case's guardian has been counseled about preventive measures, such as hand washing procedures, that must be followed to prevent transmission of disease.
  - (iv) The local health officer has discussed with the appropriate school, preschool, or daycare facility staff the need:
    - (AA) for proper hand washing procedures and other infection control practices; and (BB) to comply with all local and state rules pertaining to prevention of infectious diseases.
- (E) If an outbreak of infection is associated with a restaurant or other food service operation, the following shall occur:
  - (i) All food employees shall be screened for infection.
  - (ii) Household members and close contacts of the case shall be excluded from employment involving food handling and direct care of children or hospitalized or institutional patients until the following have been met:
    - (AA) Two (2) consecutive negative stool cultures have been collected: (aa) at least twenty-four (24) hours apart; and (bb) at least forty-eight (48) hours after cessation of any antimicrobial treatment.
    - (BB) The local health officer has determined the contact is asymptomatic.
- (F) If an outbreak occurs in a daycare facility or preschool, the following shall occur:
  - (i) All attendees and staff may be required to submit stool specimens for examination.
  - (ii) Instead of exclusion until stool negative, attendees and staff may be isolated from other attendees and staff in the same facility based on symptoms, laboratory testing, and treatment. This alternative shall only be considered if the physical structure and staff organization of the facility can accommodate isolation of various attendee groups from one another. If this alternative is selected, increased emphasis on hand washing procedures and environmental cleaning is necessary.
  - (iii) Admission of all new attendees may be suspended while the outbreak continues.
- (G) A case contact who is a food employee in a food establishment serving a highly susceptible population must abide by the following criteria:
  - (i) Restrict the contact if the contact meets one (1) of the following criteria:
    - (AA) Attended or worked in a setting of a confirmed disease outbreak of Salmonella Typhi or Paratyphi A, B (tartrate negative), or C within the past fourteen (14) days of last exposure.
    - (BB) Lives in the same household as, and has knowledge about, an individual who works in or attends a setting where there is a confirmed disease outbreak of Salmonella Typhi or Paratyphi A, B (tartrate negative), or C within the past fourteen (14) days of last exposure.
    - (CC) Lives in the same household as, and has knowledge about, an individual diagnosed with an illness caused by Salmonella Typhi or Paratyphi A, B (tartrate negative), or C within the past fourteen (14) days of last exposure.
    - (DD) Consumed food prepared by a person infected with Salmonella Typhi or Paratyphi A, B (tartrate negative), or C within the past fourteen (14) days of last exposure.
    - (EE) Consumed or prepared food implicated in a confirmed disease outbreak of Salmonella Typhi or Paratyphi A, B (tartrate negative), or C within the past fourteen (14) days of last exposure.
  - (ii) Reinstate the food employee who was restricted when one (1) of the following has occurred: (AA) More than fourteen (14) calendar days have passed since the last day the food employee was potentially exposed.

(BB) More than fourteen (14) calendar days have passed since the food employee's household contact became asymptomatic.

(3) Feces, urine, and articles soiled by feces or urine, or both, shall receive concurrent disinfection. Feces and urine may be discarded in a sanitary sewer without prior disinfection. Terminal cleaning is required.

(4) Reporting of disease is required to follow the "When to Report (from probable diagnosis)" time frame and Salmonella serotype Typhi or Paratyphi A, B (tartrate negative), or C antimicrobial susceptibility testing results are to be reported as soon as they become available.

(5) Quarantine is not applicable.

(6) Immunization is recommended only for the following people:

(A) Travelers to areas where risk of exposure to Salmonella serotype Typhi or Paratyphi A, B (tartrate negative), or C is recognized.

(B) People with close contact to a documented typhoid or paratyphoid fever carrier.

(C) Laboratory workers with frequent contact with Salmonella serotype Typhi or Paratyphi A, B (tartrate negative), or C.

(D) People living outside the United States in areas with endemic typhoid infection.

Protection of contacts is not applicable.

(7) The Centers for Disease Control and Prevention and the Council of State and Territorial Epidemiologists set the standard clinical and laboratory case definition.

*(Indiana State Department of Health; 410 IAC 1-2.5-143; effective Dec 25, 2015)*